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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,881	08/20/2001	Juha Salokannel	460-010510-US(PAR)	6759
2512	7590	03/11/2005	EXAMINER HASHEM, LISA	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			ART UNIT 2645	PAPER NUMBER

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/932,881

Applicant(s)

SALOKANNEL ET AL.

Examiner

Lisa Hashem

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 3 and 5-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Examiner acknowledges the cancellation of claims 2 and 4 in the Amendment filed, October 8, 2004, hereinafter Amendment.

#### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities: the term 'in-operation message' and 'inoperation message' are inconsistent. Examiner assumes the term 'in-operation message'. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 5, 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent Application No. 0650279 by Baptist et al, hereinafter Baptist in view of U.S. Patent No. 5,875,186 by Belanger et al, hereinafter Belanger.

Regarding claim 1, Baptist discloses a method for reducing power consumption of a wireless terminal or mobile station (Figure 1, 24) communicating with an access point (transmits and receives data; serves as the point of interconnection between the wireless LAN and a fixed wire network) (Figure 1, 16; column 1, lines 37-40; column 2, lines 30-38), in which method the wireless terminal is set to dormancy or SLEEP state (column 3, lines 47-51), an in-operation message is inherently transmitted at intervals from the wireless terminal to the access point, wherein an awake timer (Figure 3, 78) resets each time a message is detected from said terminal,

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and for sending the in-operation message, the wireless terminal is set in an active state or AWAKE-1 state (column 4, line 39 – column 5, line 25), wherein the wireless terminal is returned to dormancy substantially immediately after the transmission of the in-operation message (column 3, lines 31-42).

Baptist does not disclose the in-operation message used is a message to which no acknowledgement message is transmitted from the access point.

Belanger discloses a method for reducing power consumption of a wireless terminal or mobile unit communicating with an access point, in which method the wireless terminal is set to dormancy or SLEEP state. Wherein, Belanger further discloses no response from the access point is transmitted to the mobile unit when the mobile unit sends a ForcedSleep message (col. 26, lines 40-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Baptist to include no acknowledgement as taught by Belanger. One of ordinary skill in the art would have been lead to make such a modification to reduce the loading of an access point.

Regarding claim 3, the method according to claim 1, wherein Baptist further discloses the in-operation message used is a resource request, in which the resource requirement is set as a value for which no resource allocation is performed for the wireless terminal, wherein the mobile station sends a response message to a watchdog message that it is still operative (column 5, line 39 – column 6, line 5).

Regarding claim 5, the method according to claim 1, wherein Baptist further discloses in connection with the setting to dormancy, a maximum transmission interval is selected for the in-

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operation messages, the wireless terminal shifts to the active state for transmitting the in-operation message before the selected maximum interval has expired from the transmission of the previous in-operation message, and reception of in-operation messages is monitored at the access point within the maximum interval (column 3, lines 32-42; column 5, lines 5-29).

Regarding claim 7, please see the rejection of the method in claim 1 to reject the communication system in claim 10.

Regarding claim 8, the communication system according to claim 7, wherein Baptist further discloses comprises means for selecting a maximum transmission interval for the in-operation messages in connection with the setting to dormancy, wherein the wireless terminal comprises means for setting to the active state for transmitting the in-operation message before the selected maximum interval has expired from the transmission of the previous in-operation message, and the access point comprises means for monitoring reception of in-operation messages within the maximum interval (column 3, lines 32-42; column 5, lines 5-29).

Regarding claim 10, please see the rejection of the method in claim 1 to reject the wireless terminal in claim 10.

5. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baptist in view of Belanger as applied to claims 1 and 7, respectively, above, and further in view of U.S. Patent No. 6,693,915 by Lappetelainen et al, hereinafter Lappetelainen.

Regarding claim 6, the method according to claim 1, wherein Baptist further discloses a wired, cable-based LAN system is used in data transmission between the access point and the wireless terminal (column 2, lines 30-36).

Baptist in view of Belanger do not disclose a HIPERLAN/2 system.

Lappetelainen discloses a wireless data transmission system that comprises a wireless terminal communicating with an access point (see Abstract), wherein the system is a HIPERLAN/2 system (column 1, lines 43-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Baptist in view of Belanger to include a HIPERLAN/2 system as taught by Lappetelainen to provide a radio data transmission system for a local area network. One of ordinary skill in the art would have been lead to make such a modification since a HIPERLAN/2 system provides a data transmission rate that aims to reach the order of 25 Mbit/s when the maximum connection distance is some tens of meters. This is suitable to be used within the same building for example, as an internal local area network for a single office.

Regarding claim 9, please see the rejection of the method in claim 6 to reject the communication system in claim 9.

### ***Response to Arguments***

6. Applicant's arguments, see Amendment, with respect to the rejection(s) of claim(s) 1, 3, and 5-10 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection of claims 1, 3, and 5-10 is made. Please see all rejections above.

7. Regarding Applicant's remarks in the Amendment, the limitations on page 7 of the Amendment, '...the idea of the present invention is that the access point should never send a response to a "resource request" or a similar message from the terminal...' and the limitations in claims 1, 7, and 10, '...and the in-operation message used is a message to which no acknowledgement is transmitted from the access point...' are different. The '...idea of the

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access point never sending a response...' (broad limitation) and '...no acknowledgement is transmitted from the access point...' (narrow limitation) have different meanings. Examiner assumes the remarks in the Amendment are the limitations set forth in the claimed invention. Please see all rejections above.

8. All corrections regarding 35 USC 112, 2<sup>nd</sup> paragraph, drawings, and specification in the Amendment not noted above are acknowledged by the Examiner.

9. Accordingly, this action is **NON-FINAL**.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- European Patent Application No. 0907262 by Romans disclose a mobile station that has an active mode in which it receives and transmits messages and a sleep mode which incurs reduced power consumption

11. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**Or faxed to:**

(703) 872-9314 (for formal communications intended for entry)

**Or call:**

(703) 306-0377 (for customer service assistance)

Hand-delivered responses should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Hashem whose telephone number is (703) 305-4302. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (703) 305-4895. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

LH

lh

February 4, 2005

 2/4/05  
ROLAND G. FOSTER  
PRIMARY PATENT EXAMINER